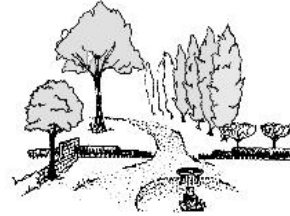


Got Trees?

Environmental and Economic Benefits of Trees

Most trees are planted in cities or communities to provide beauty or shade. These are two excellent reasons for their use, and they also serve many other purposes, which are helpful to consider when selecting a tree to plant.



Trees alter the environment in which we live by moderating climate, improving air quality, and conserving water. By using trees in our neighborhoods, we are able to moderate the heat-island effect caused by pavement and buildings. Leaves filter the air we breathe by removing dust and other particulates. Rain then washes the pollutants to the ground. Leaves absorb carbon dioxide from the air to form carbohydrates that are used in the plant's structure and function. In this process, leaves also absorb other air pollutants—such as ozone, carbon monoxide, and sulfur dioxide—and give off oxygen.

Wind speed and direction can be affected by trees. The more compact the foliage on the tree or group of trees, the greater the influence of the windbreak. The downward fall of rain is initially absorbed or deflected by trees, which provides some protection for people, pets, and buildings. Trees intercept water, store some of it, and reduce storm runoff and the possibility of flooding.

Individual trees have value, which varies by the type of species, size, condition, and function in the landscape. The economic benefits of trees can be both direct and indirect. Direct economic benefits are usually associated with energy costs. Air-conditioning costs are lower in a tree-shaded home. Heating costs are reduced when a home has a windbreak. Trees increase in value from the time they are planted until they mature. Trees are a wise investment because landscaped homes are more valuable than non-landscaped homes. The savings in energy costs and the increase in property value directly benefit each homeowner.

The indirect economic benefits of trees are even greater. These benefits are available to the community. Lowered electricity bills are paid by customers when power companies are able to use less water in their cooling towers, build fewer new facilities to meet peak demands, use reduced amounts of fossil fuel in their furnaces, and use fewer measures to control air pollution. Communities also can save money if fewer facilities must be built to control storm water in the region. To the individual, these savings are small, but to the community, reductions in these expenses are often in the thousands of dollars.

This is the first in a series of articles provided as a public educational campaign on trees in the City of Milpitas. Copyright International Society of Arboriculture. Used with permission. Reprinted from www.treesaregood.org. For more information on Milpitas City Street Trees, contact the Public Works Department at (408) 586-2601.

